6. Schematic Diagrams

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Note

For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the “electrostatically sensitive (ES) devices” section of this service manual.

Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.

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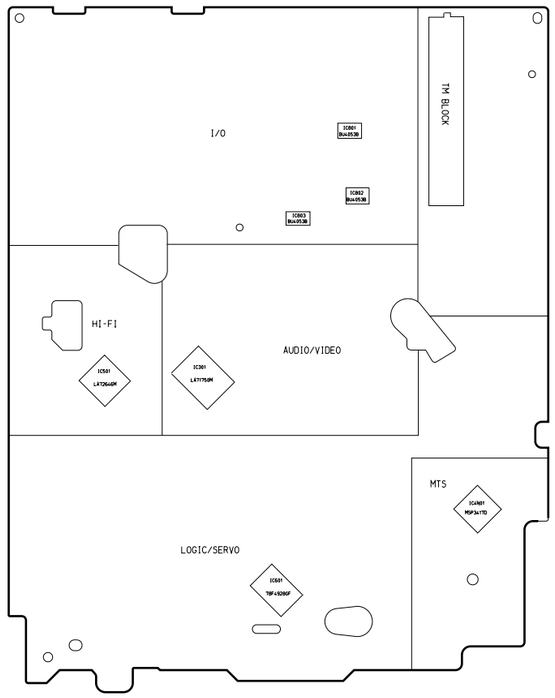
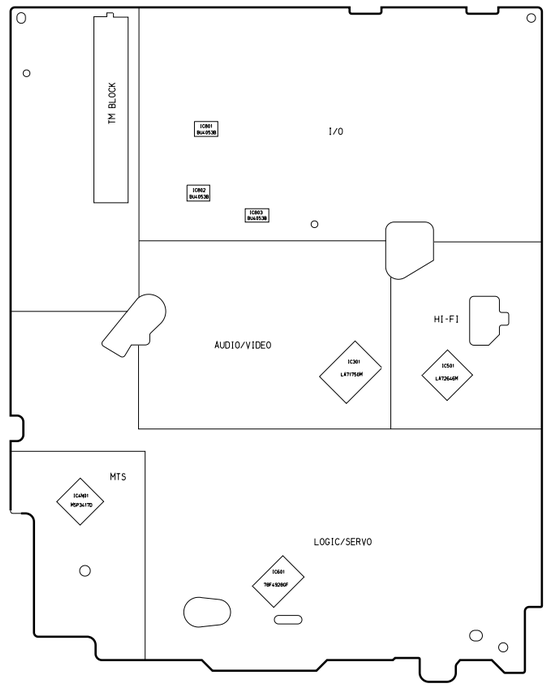
◆ Block Identification of Main PCB

VCR MAIN PCB

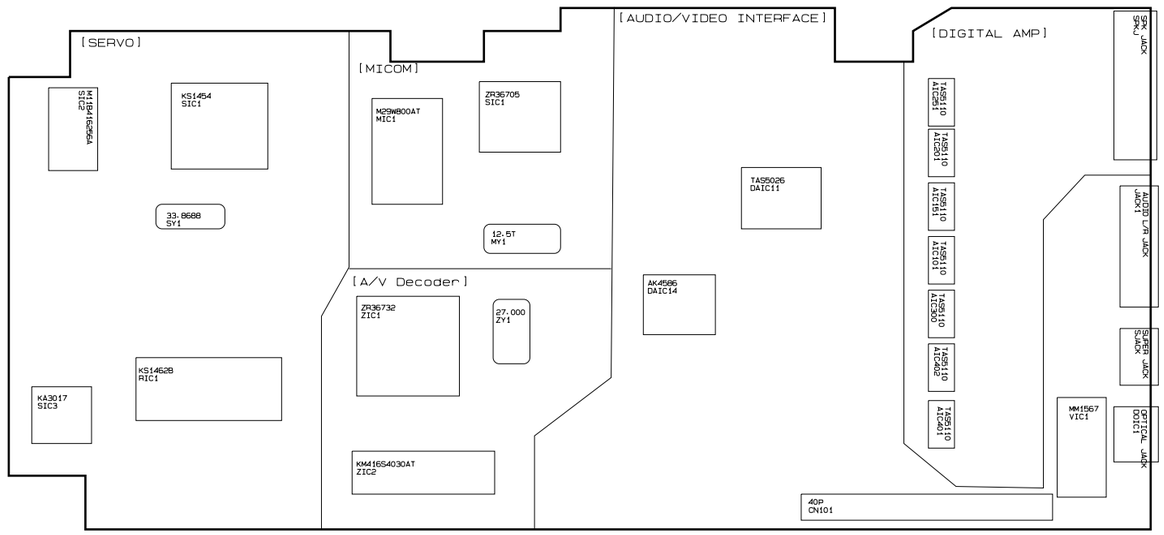


<Component Side>



<Conductor Side>

DVD MAIN PCB



<Component Side>

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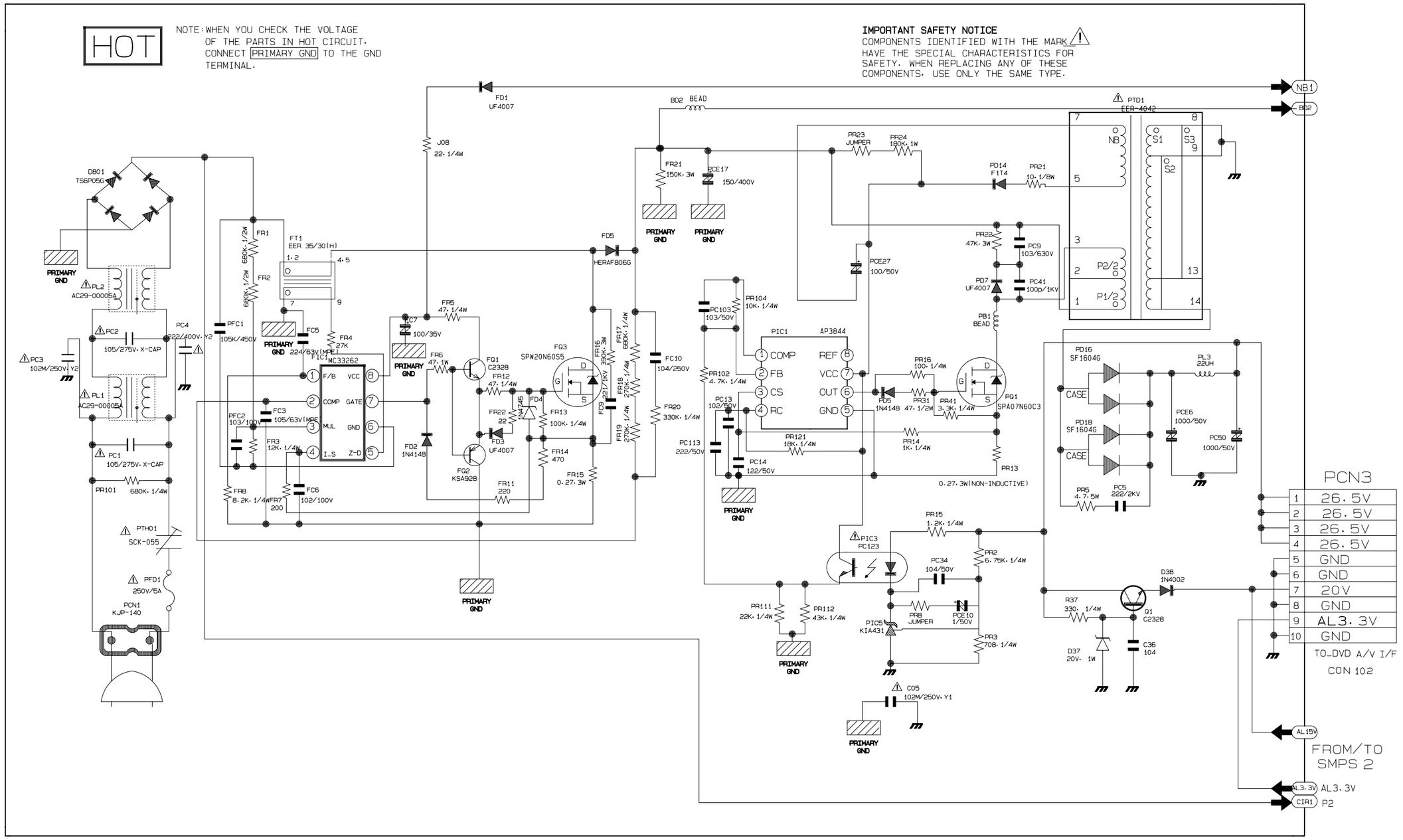
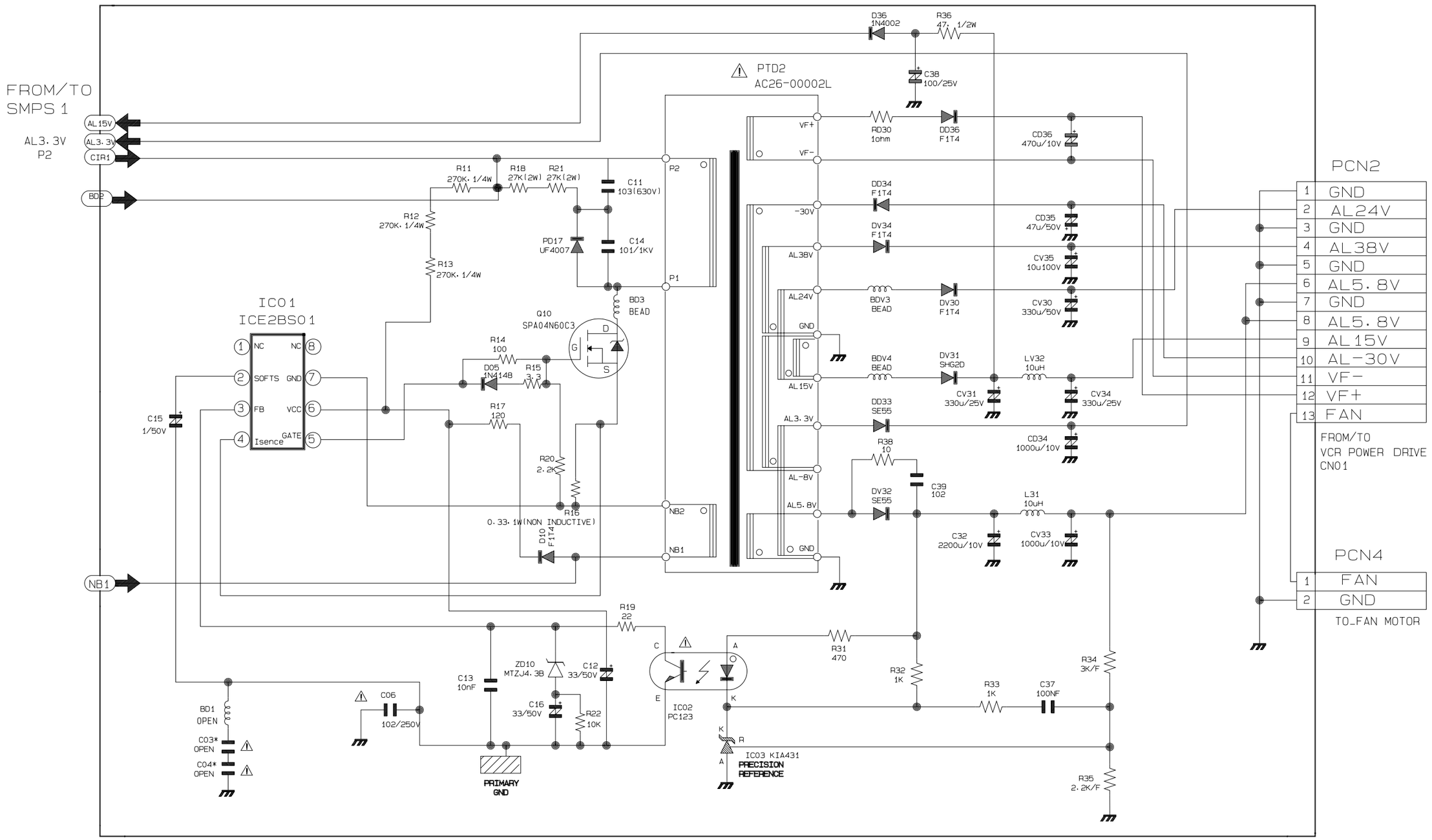
6-1 S.M.P.S.-1


HOT
NOTE: WHEN YOU CHECK THE VOLTAGE OF THE PARTS IN HOT CIRCUIT. CONNECT PRIMARY GND TO THE GND TERMINAL.
IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.
NB1
BD2
FD1 UF4007
BD2 BEAD
PTD1 EER-4042
J08 22. 1/4W
DB01 TS6P05G
PRIMARY GND
PL2 AC29-00005A
PC2 105/275V. X-CAP
PC3 102M/250V. Y2
PC4 222/400V. Y2
PL1 AC29-00005A
PC1 105/275V. X-CAP
PR101 680K. 1/4W
PTH01 SCK-055
PFD1 250V/5A
PCN1 KJP-140
PFC1 105K/450V
FR1 680K. 1/2W
FR2 680K. 1/2W
FT1 EER 35/30(H)
FC5 224/63V(MPE)
FR4 27K
FIC1 MC33262
F/B VCC COMP GATE MUL GND I_S Z-D
PFC2 103/100V
FC3 105/63V(MPE)
FR3 12K. 1/4W
FR8 8.2K. 1/4W
FR7 200
FC6 102/100V
FR5 47. 1/4W
FC7 100/35V
FR6 47. 1W
FD2 1N4148
FQ1 C2328
FR12 47. 1/4W
FD4 1M4745
FR22 22
FD3 UF4007
FQ2 KSA928
FR11 220
FR13 100K. 1/4W
FR14 470
FR15 0. 27. 3W
FD5 HERAF806G
FR21 150K. 3W
PCE17 150/400V
FQ3 SPW20N60S5
FR16 390K. 3W
FR17 680K. 1/4W
FR18 27K. 1/4W
FC9 221/1KV
FR19 270. 1/4W
FR20 330K. 1/4W
FC10 104/250V
PR104 10K. 1/4W
PC103 103/50V
PR102 4. 7K. 1/4W
PC13 102/50V
PC113 222/50V
PC14 122/50V
PIC1 AP3844
COMP FB CS RC REF VCC OUT GND
PR23 JUMPER
PR24 180K. 1W
PD14 F1T4
PR21 10. 1/8W
PCE27 100/50V
PR22 47K. 3W
PC9 103/630V
PD7 UF4007
PC41 100P/1KV
PB1 BEAD
PR16 100. 1/4W
PD5 1N4148
PR31 47. 1/2W
PR41 3. 3K. 1/4W
PQ1 SPA07N60C3
PR121 18K. 1/4W
PR14 1K. 1/4W
PR13 0. 27. 3W(NON-INDUCTIVE)
PD16 SF1604G
PD18 SF1604G
CASE
PL3 22UH
PCE6 1000/50V
PC50 1000/50V
PR5 4. 7. 5W
PC5 222/2KV
PCN3
1 26. 5V
2 26. 5V
3 26. 5V
4 26. 5V
5 GND
6 GND
7 20V
8 GND
9 AL3. 3V
10 GND
TO_DVD A/V I/F CON 102
PR15 1. 2K. 1/4W
PIC3 PC123
PR2 6. 75K. 1/4W
PC34 104/50V
PR111 22K. 1/4W
PR112 43K. 1/4W
PIC5 KIA431
PR8 JUMPER
PCE10 1/50V
PR3 708. 1/4W
C05 102M/250V. Y1
D38 1N4002
R37 330. 1/4W
Q1 C2328
D37 20V. 1W
C36 104
AL15V
FROM/TO SMPS 2
AL3.3V AL3. 3V
CIR1 P2

6-2 S.M.P.S.-2



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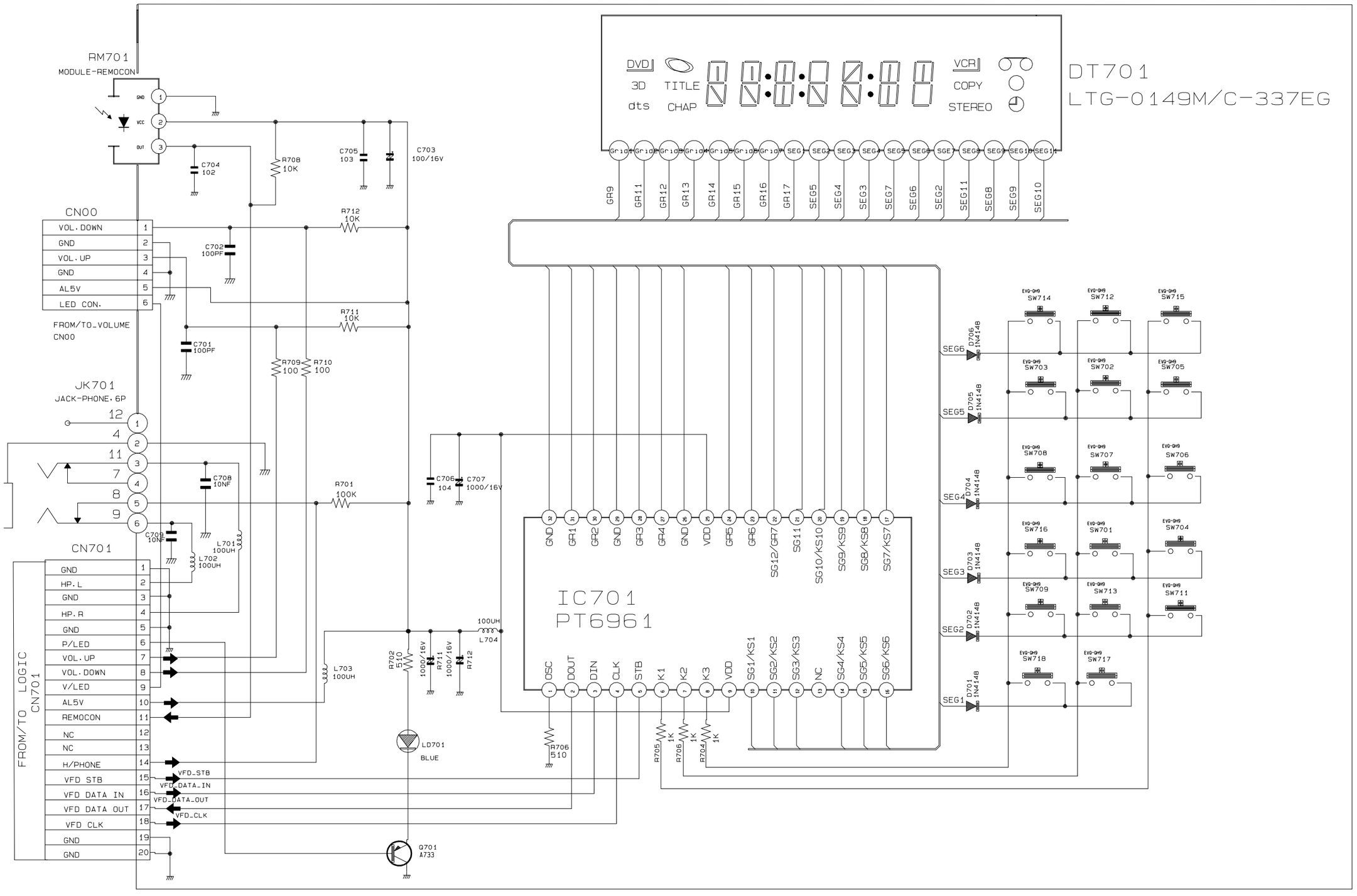
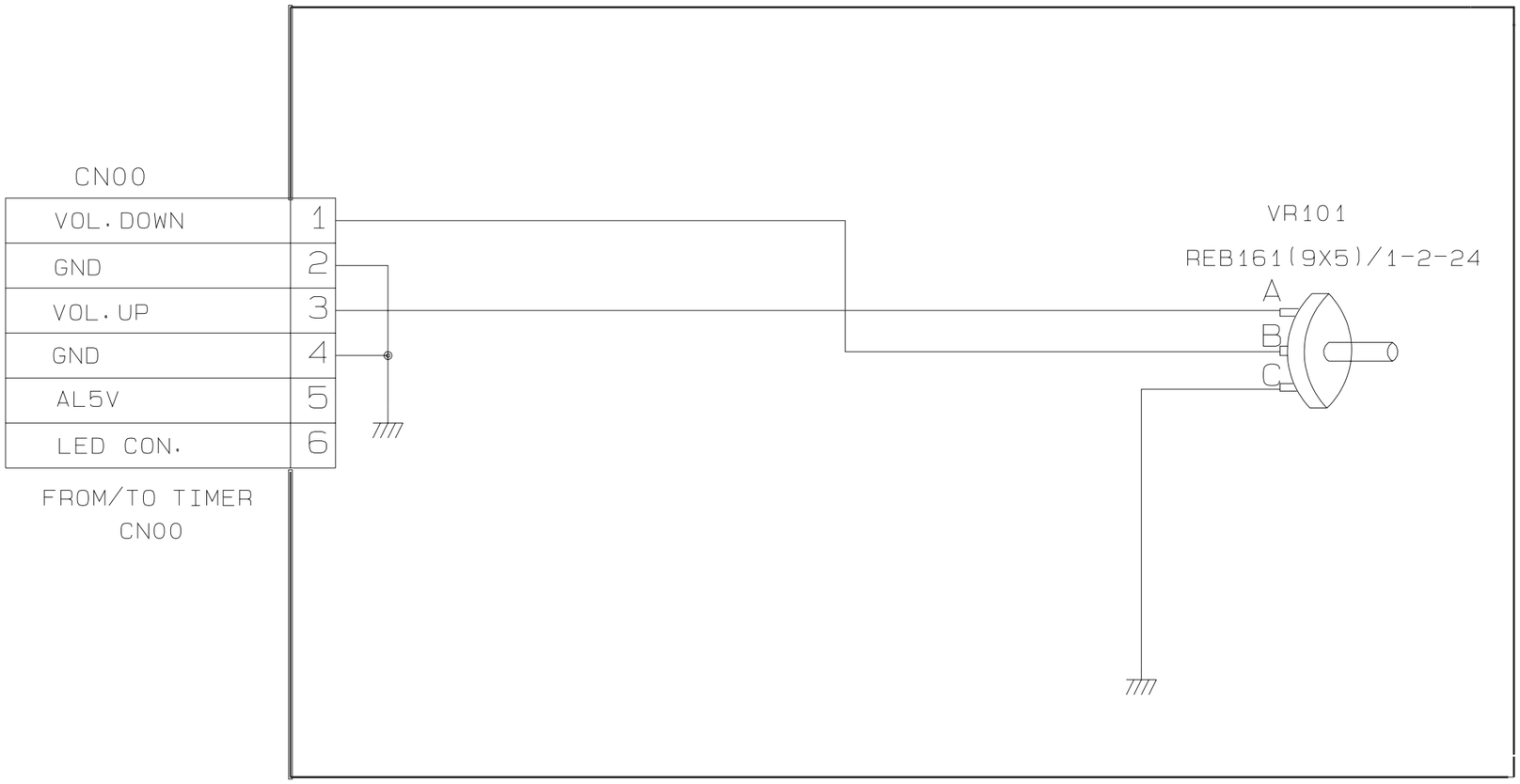
6-3 Function-Timer



6-4 Volume



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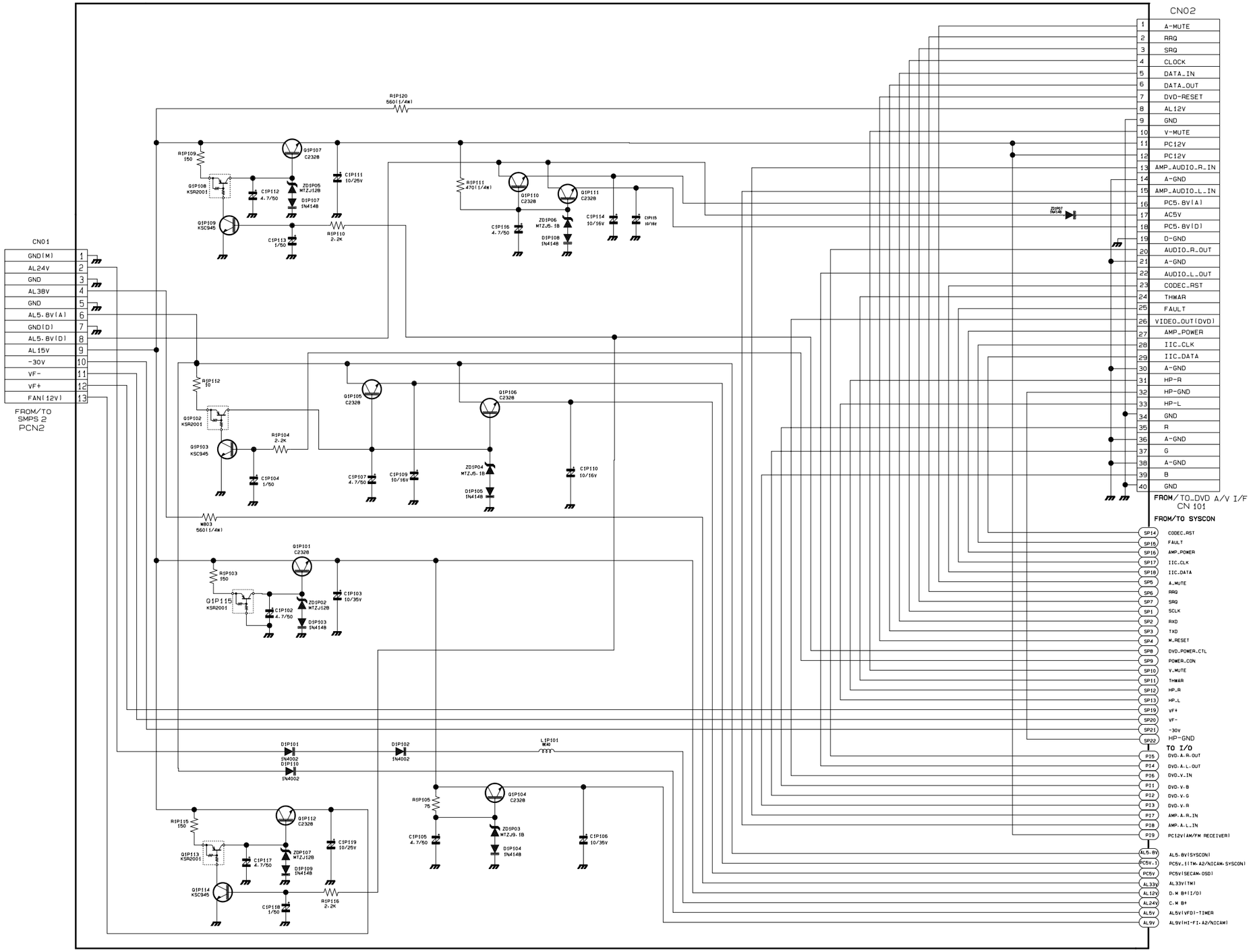
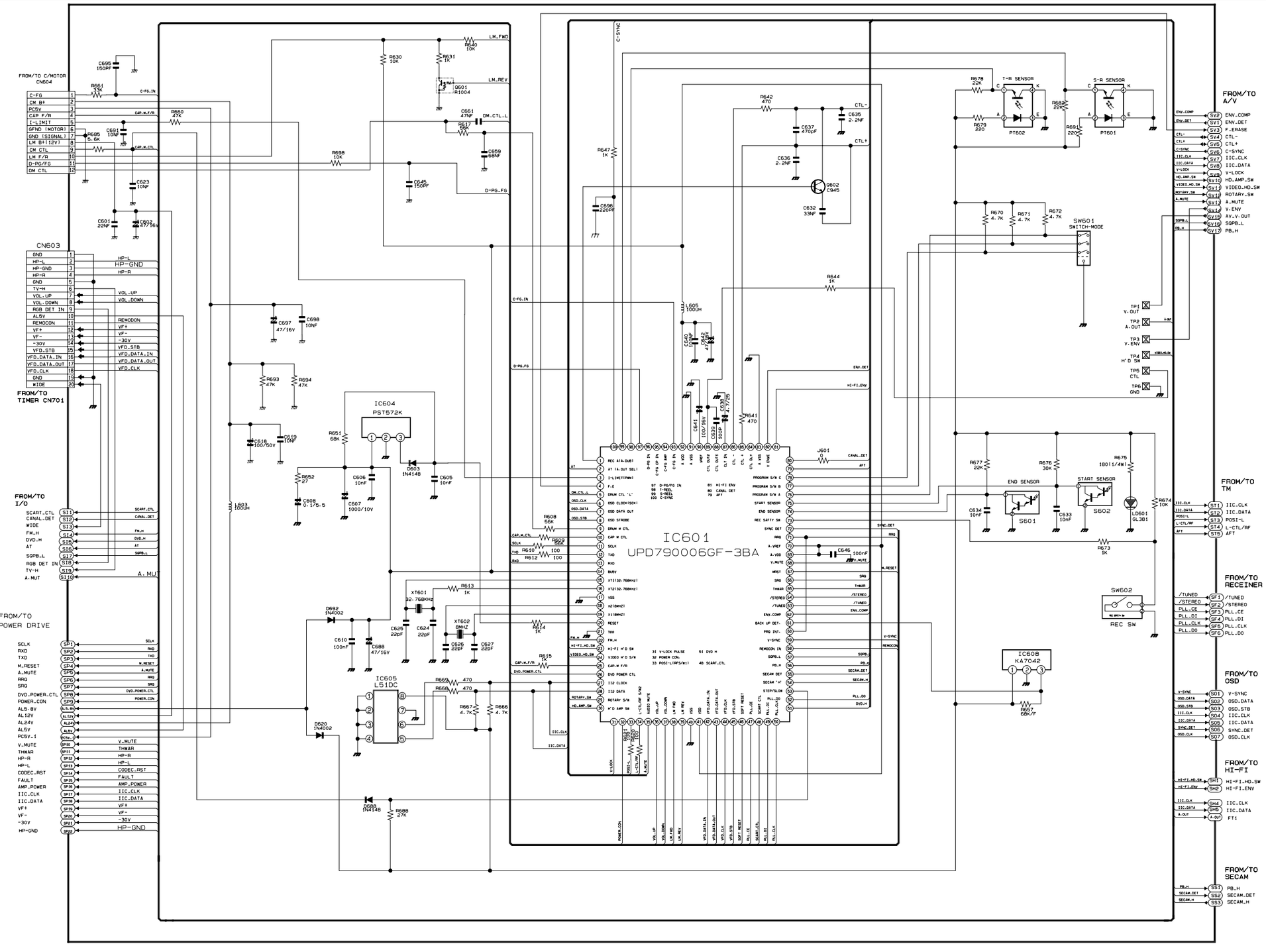
6-5 Power Drive



6-6 Syscon/Servo (Logic)



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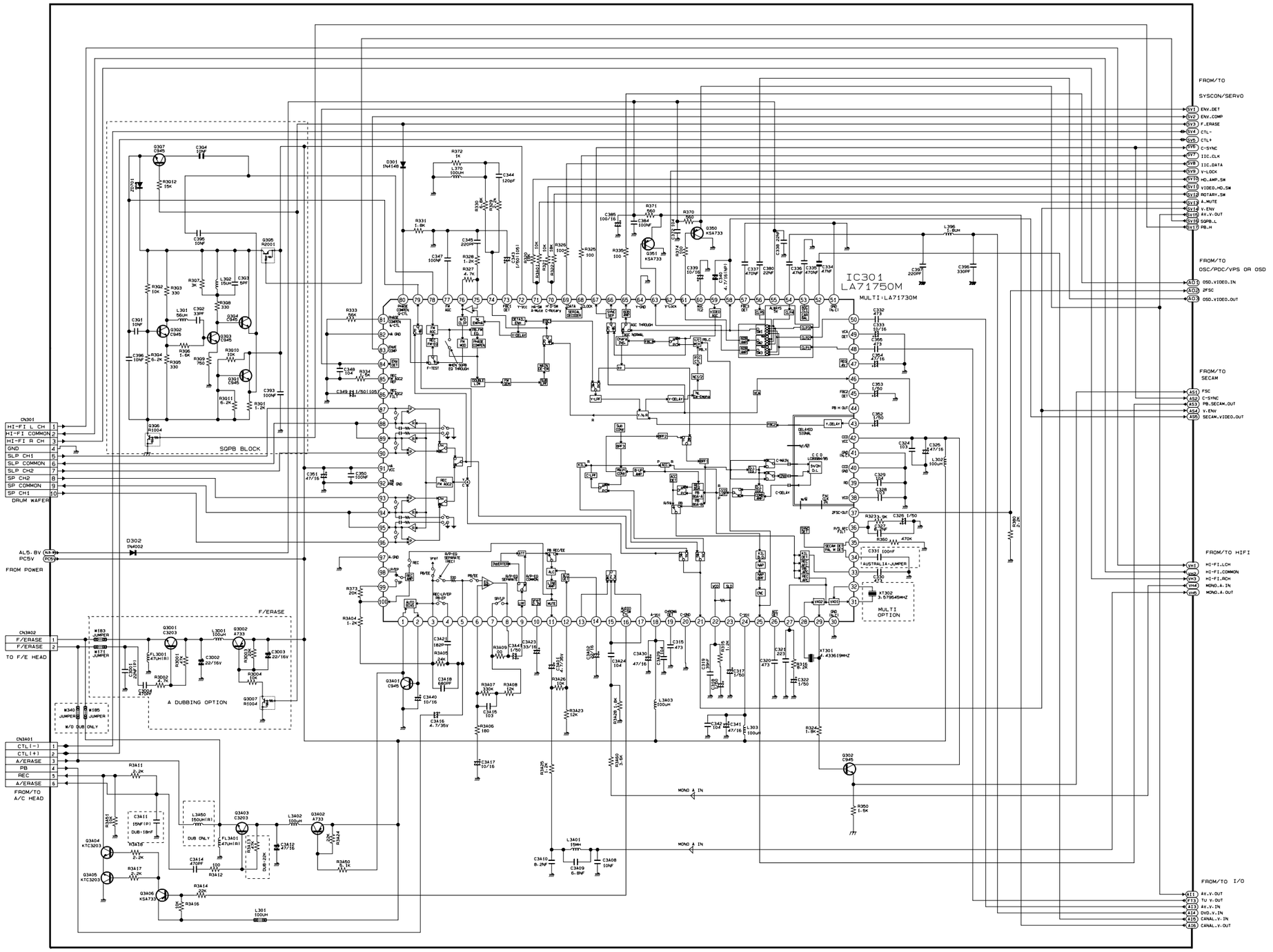
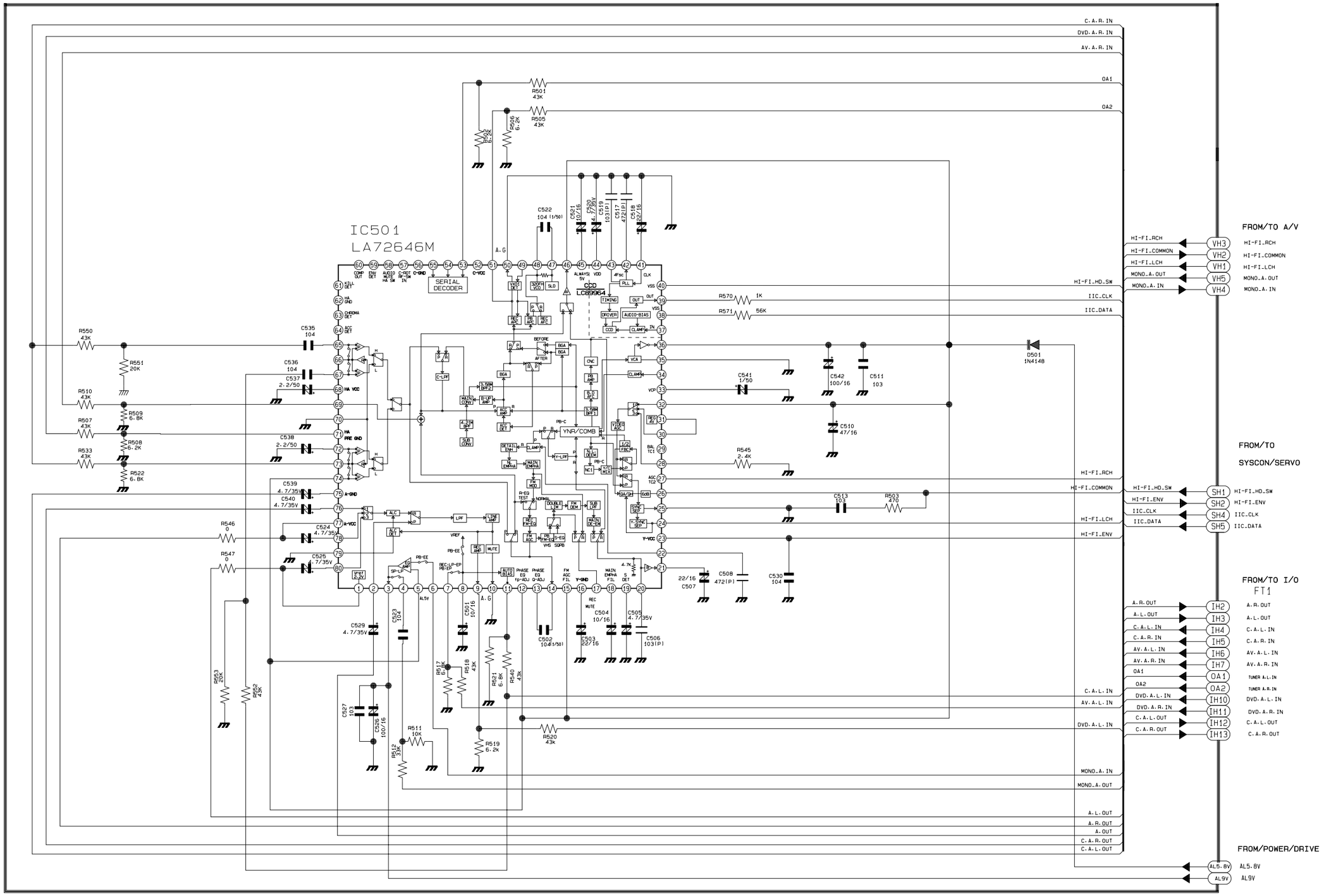
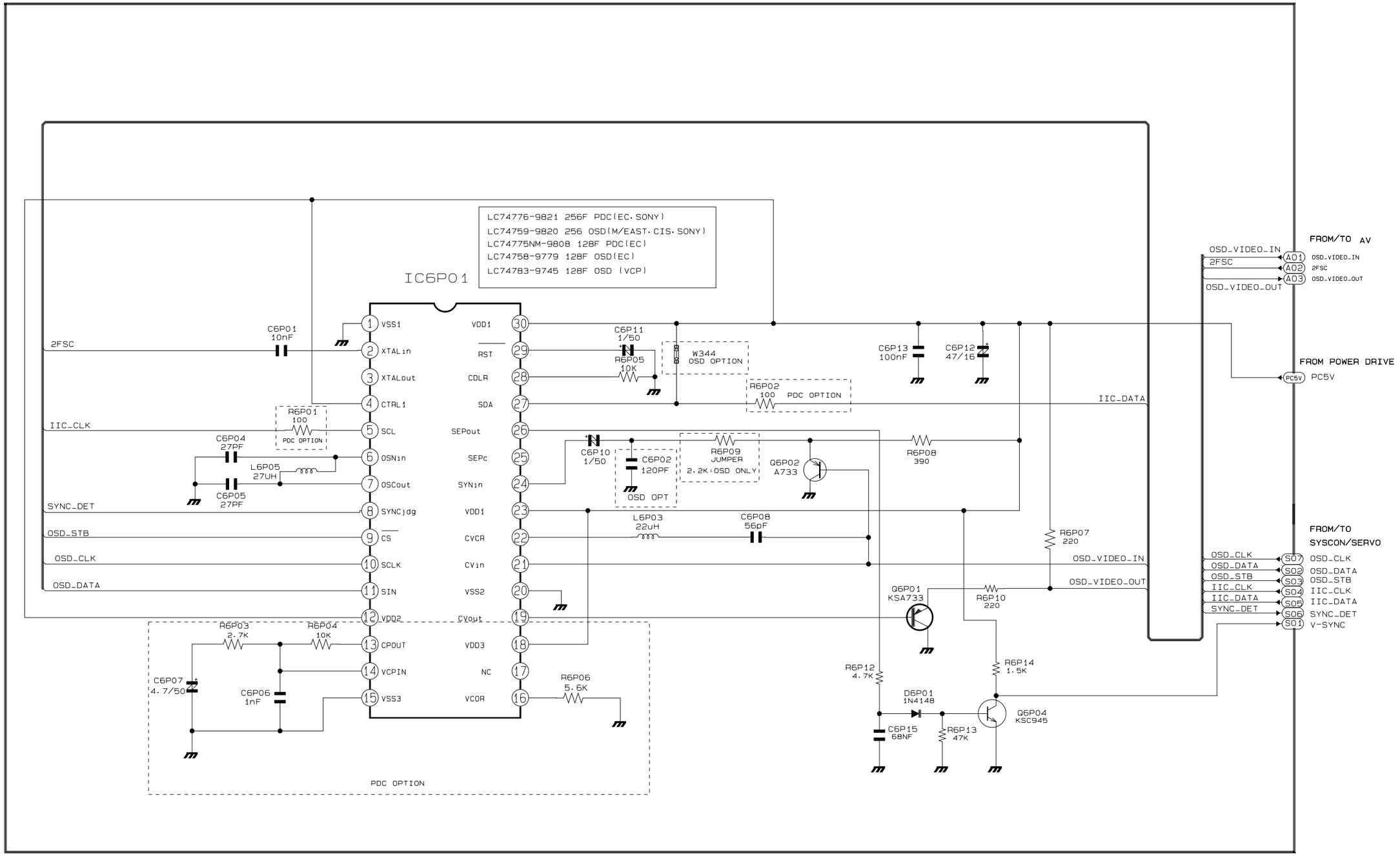
6-7 A/V


IC301
LA71750M
MULTI+LA71730M
SQPB BLOCK
F/ERASE
A DUBBING OPTION
W/O DUB ONLY
MULTI OPTION
MONO A IN
FROM/TO SYSCON/SERVO
FROM/TO OSC/PDC/VPS OR OSD
FROM/TO SECAM
FROM/TO HIFI
FROM/TO I/O
FROM/TO A/C HEAD
FROM POWER
TO F/E HEAD
DRUM WAFER

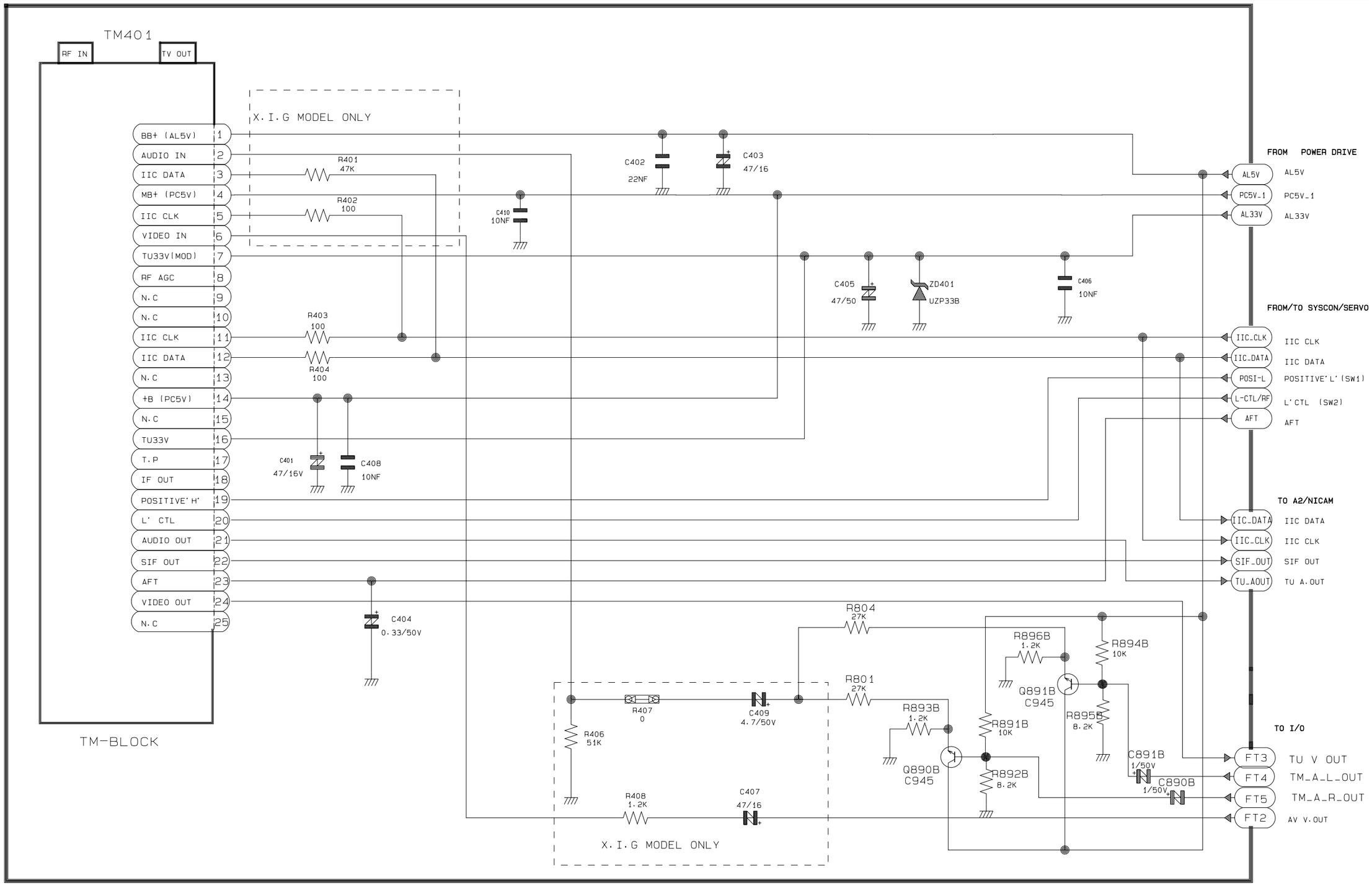
6-8 Hi-Fi


IC501
LA72646M
SERIAL DECODER
CCD
LC89964
YNR/COMB
C.A.R.IN
DVD.A.R.IN
AV.A.R.IN
OA1
OA2
HI-FI_HD_SW
IIC_CLK
IIC_DATA
HI-FI_RCH
HI-FI_COMMON
HI-FI_LCH
MONO_A.OUT
MONO_A.IN
FROM/TO A/V
VH3 HI-FI_RCH
VH2 HI-FI_COMMON
VH1 HI-FI_LCH
VH5 MONO_A.OUT
VH4 MONO_A.IN
FROM/TO
SYSCON/SERVO
SH1 HI-FI_HD_SW
SH2 HI-FI_ENV
SH4 IIC_CLK
SH5 IIC_DATA
FROM/TO I/O
FT1
IH2 A.R.OUT
IH3 A.L.OUT
IH4 C.A.L.IN
IH5 C.A.R.IN
IH6 AV.A.L.IN
IH7 AV.A.R.IN
OA1 TUNER A.L.IN
OA2 TUNER A.R.IN
IH10 DVD.A.L.IN
IH11 DVD.A.R.IN
IH12 C.A.L.OUT
IH13 C.A.R.OUT
FROM/POWER/DRIVE
AL5.8V
AL9V
D501 1N4148
R501 43K
R505 43K
R570 1K
R571 56K
R550 43K
R551 20K
R510 43K
R509 6.8K
R507 43K
R508 6.2K
R533 43K
R522 6.8K
R546 0
R547 0
R553 20K
R552 43K
R545 2.4K
R503 470
R520 43k
R511 10K
R512 33K
R519 6.2K
C522 104 (1/50)
C521 10/16
C520 .47/35V
C519 103(P)
C517 472(P)
C518 22/16
C535 104
C536 104
C537 2.2/50
C538 2.2/50
C539 4.7/35V
C540 4.7/35V
C524 4.7/35V
C526 4.7/35V
C529 4.7/35V
C523 104
C527 103
C528 100/16
C501 10/16
C502 104(1/50)
C503 22/16
C504 10/16
C505 4.7/35V
C506 103(P)
C541 1/50
C542 100/16
C511 103
C510 47/16
C513 103
C508 472(P)
C530 104
C507 22/16

6-9 OSD/YPS/PDC



6-10 TM



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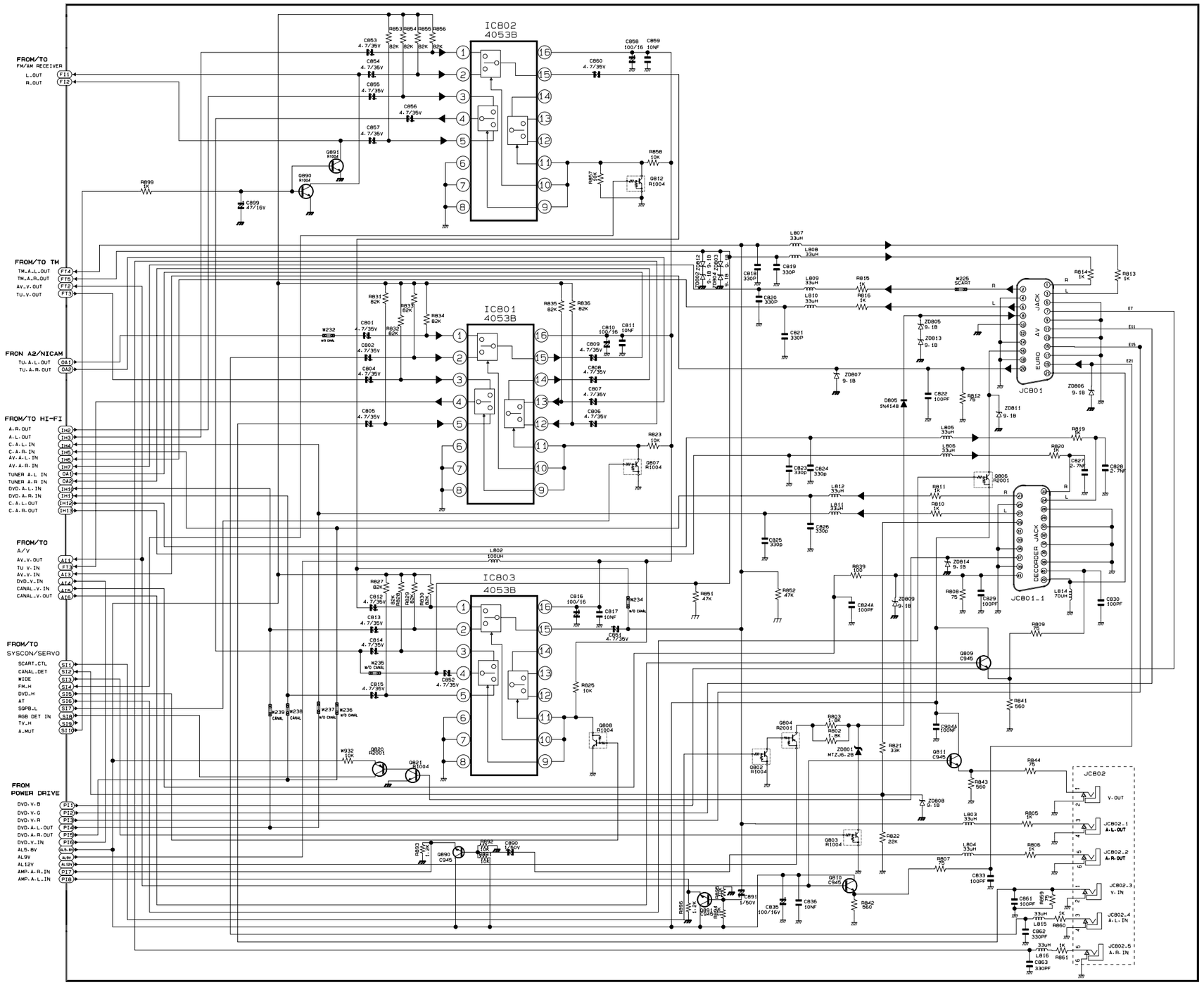
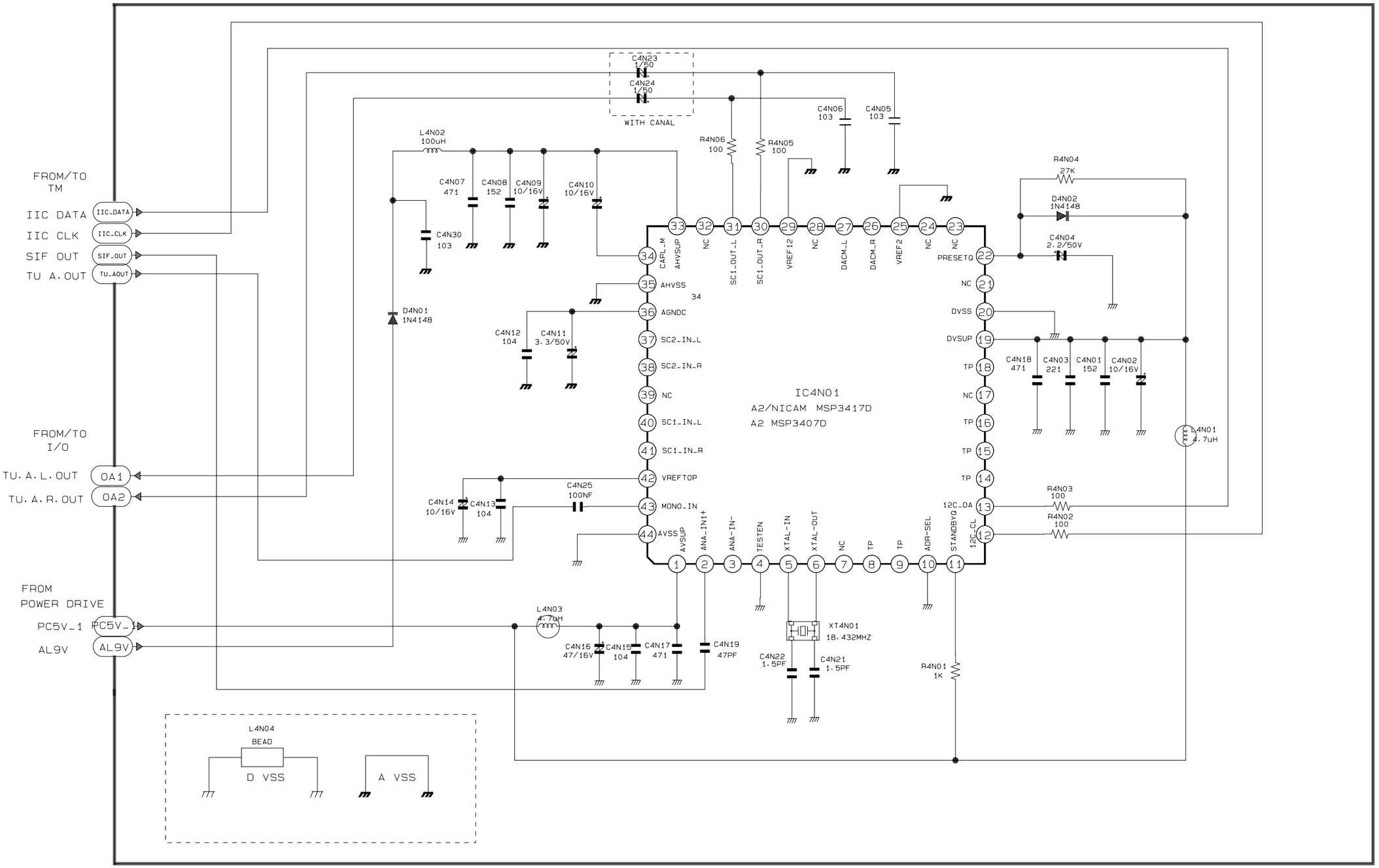
6-11 Input-Output



6-12 A2/NICAM



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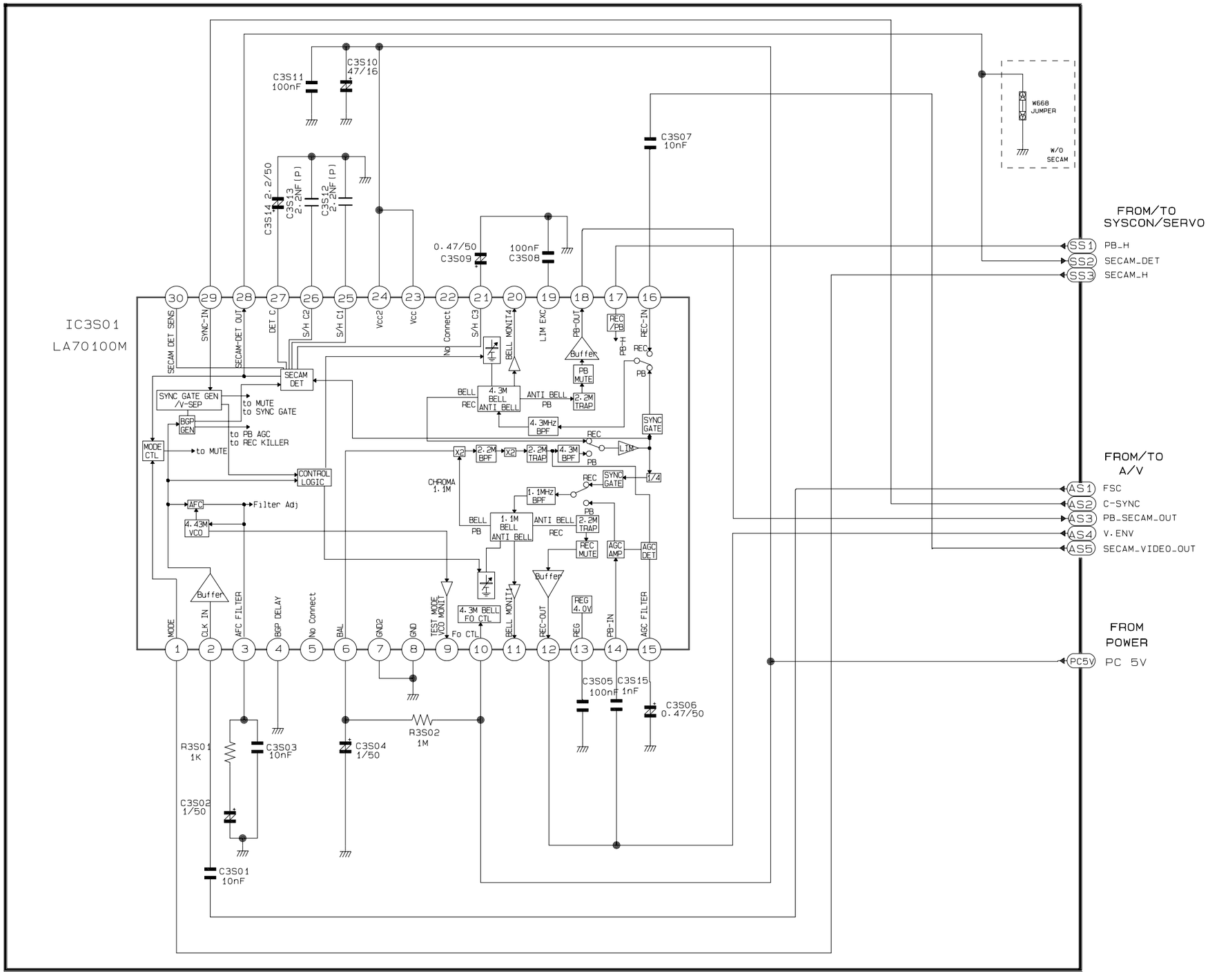
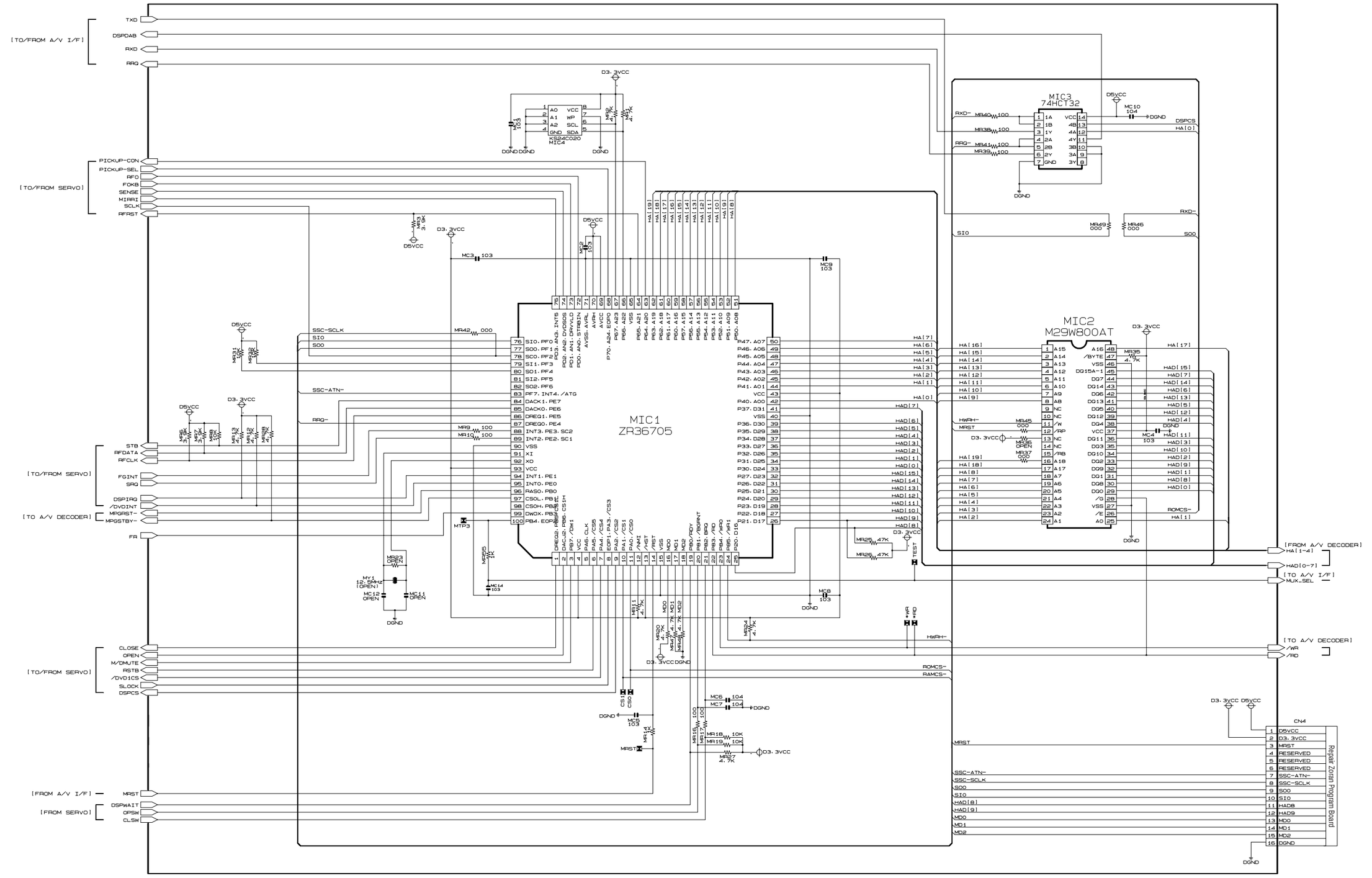
6-13 SECAM


IC3S01
LA70100M
C3S11 100nF
C3S10 47/16
C3S07 10nF
W668 JUMPER
W/O SECAM
C3S14 2.2/50
C3S13 2.2NF(P)
C3S12 2.2NF(P)
0.47/50 C3S09
100nF C3S08
FROM/TO SYSCON/SERVO
SS1 PB_H
SS2 SECAM_DET
SS3 SECAM_H
30 SECAM DET SENS
29 SYNC-IN
28 SECAM-DET OUT
27 DET C
26 S/H C2
25 S/H C1
24 Vcc2
23 Vcc
22 No Connect
21 S/H C3
20 BELL MONIT
19 LIM EXC
18 PB-OUT
17 REC/PB
16 REC-IN
SECAM DET
SYNC GATE GEN /V-SEP
to MUTE
to SYNC GATE
BGP GEN
to PB AGC
to REC KILLER
MODE CTL
to MUTE
CONTROL LOGIC
AFC
Filter Adj
4.43M VCO
Buffer
4.3M BELL ANTI BELL
BELL REC
ANTI BELL PB
2.2M TRAP
PB MUTE
Buffer
REC
PB
4.3MHz BPF
SYNC GATE
X2
2.2M BPF
X2
2.2M TRAP
4.3M BPF
PB
LIM
REC
SYNC GATE
1/4
CHROMA 1.1M
1.1MHz BPF
PB
BELL PB
1.1M BELL ANTI BELL
ANTI BELL REC
2.2M TRAP
REC MUTE
AGC AMP
AGC DET
Buffer
4.3M BELL FO CTL
1 MODE
2 CLK IN
3 AFC FILTER
4 BGP DELAY
5 No Connect
6 BAL
7 GND2
8 GND
9 TEST MODE VCO MONIT
10 Fo CTL
11 BELL MONIT
12 REC-OUT
13 REG 4.0V
14 PB-IN
15 AGC FILTER
C3S05 100nF
C3S15 1nF
C3S06 0.47/50
R3S01 1K
C3S03 10nF
C3S02 1/50
C3S01 10nF
C3S04 1/50
R3S02 1M
FROM/TO A/V
AS1 FSC
AS2 C-SYNC
AS3 PB_SECAM_OUT
AS4 V.ENV
AS5 SECAM_VIDEO_OUT
FROM POWER
PC5V PC 5V

6-14 DVD Micom



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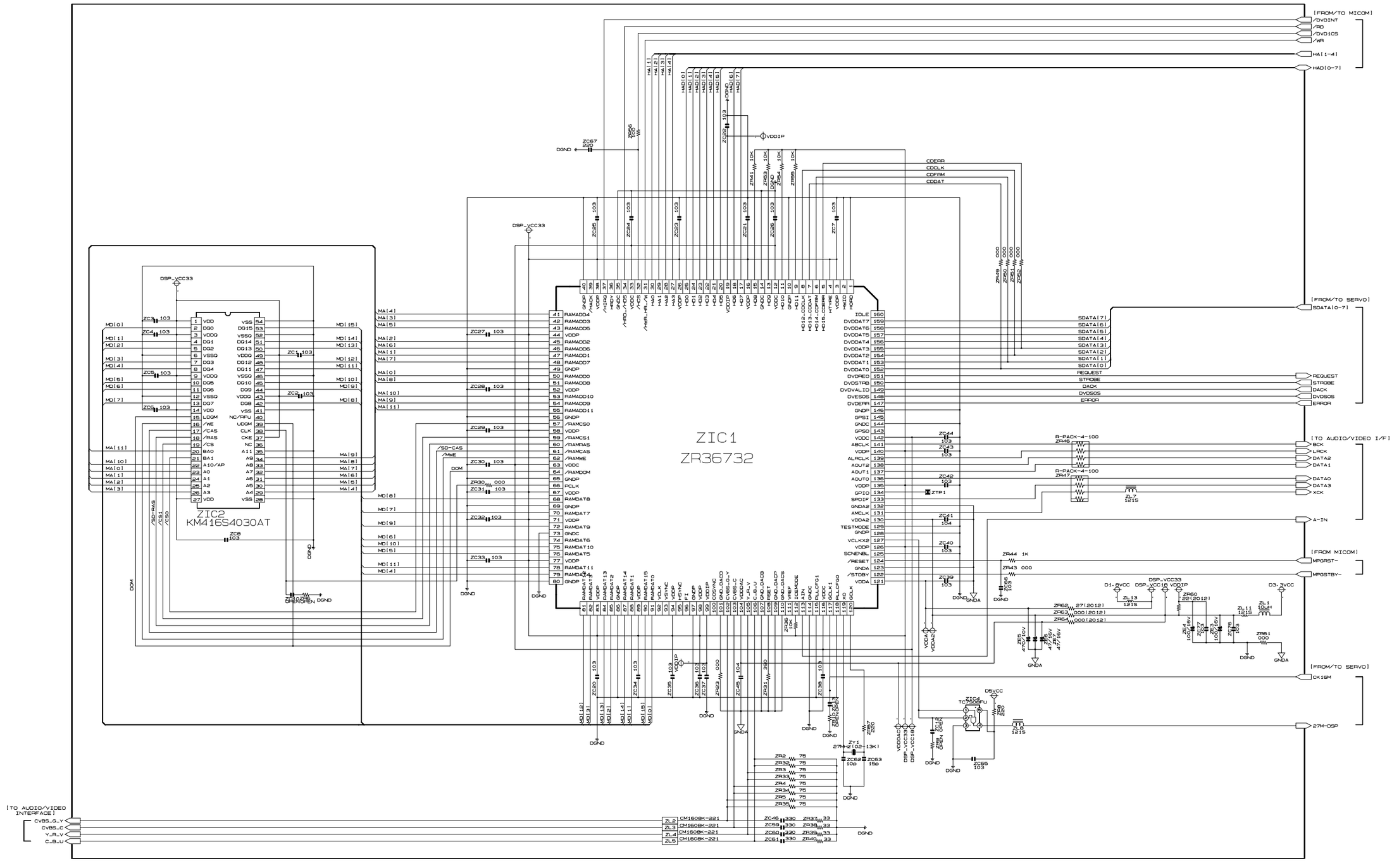
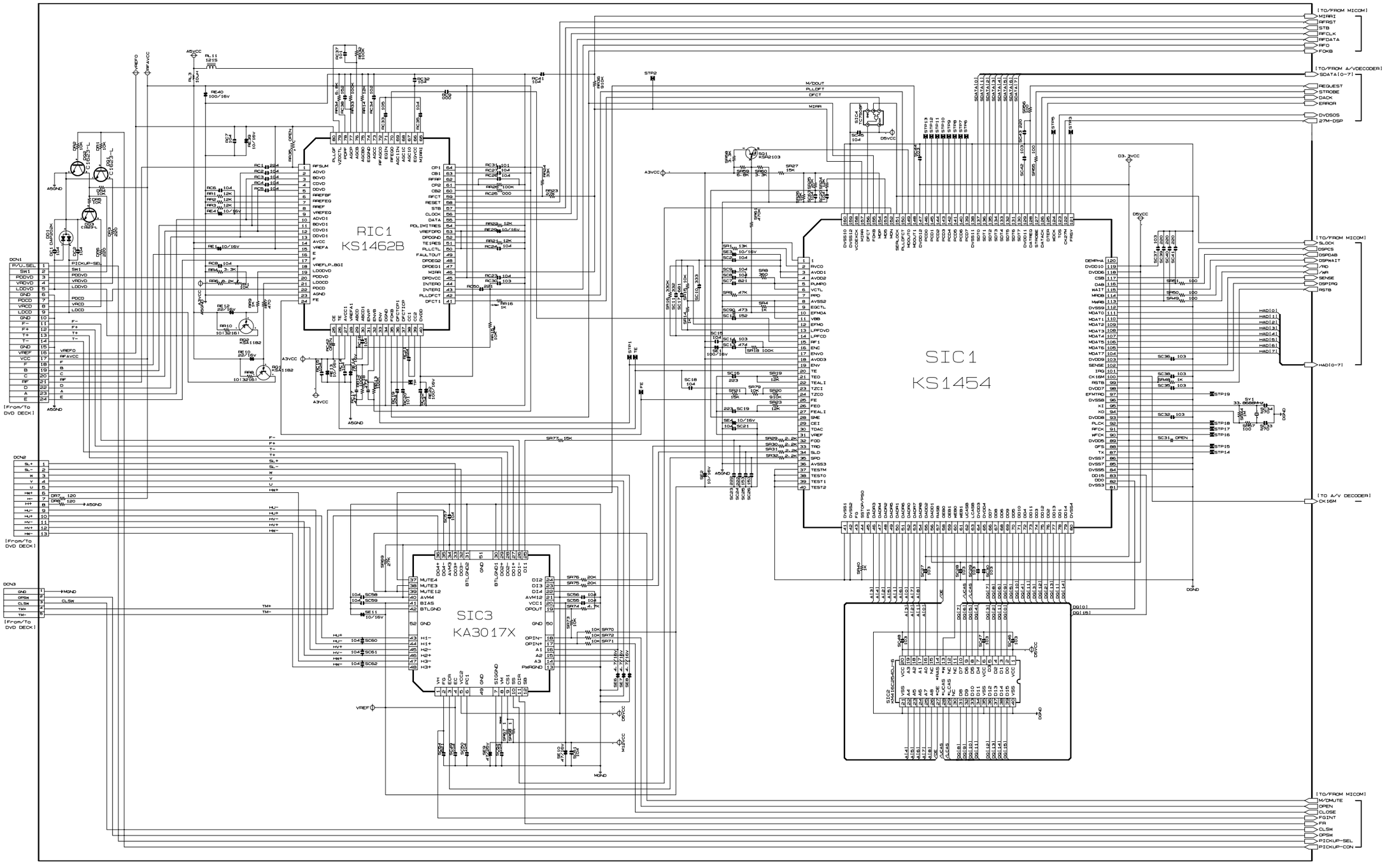
6-15 DVD AV Decoder



6-16 DVD Servo



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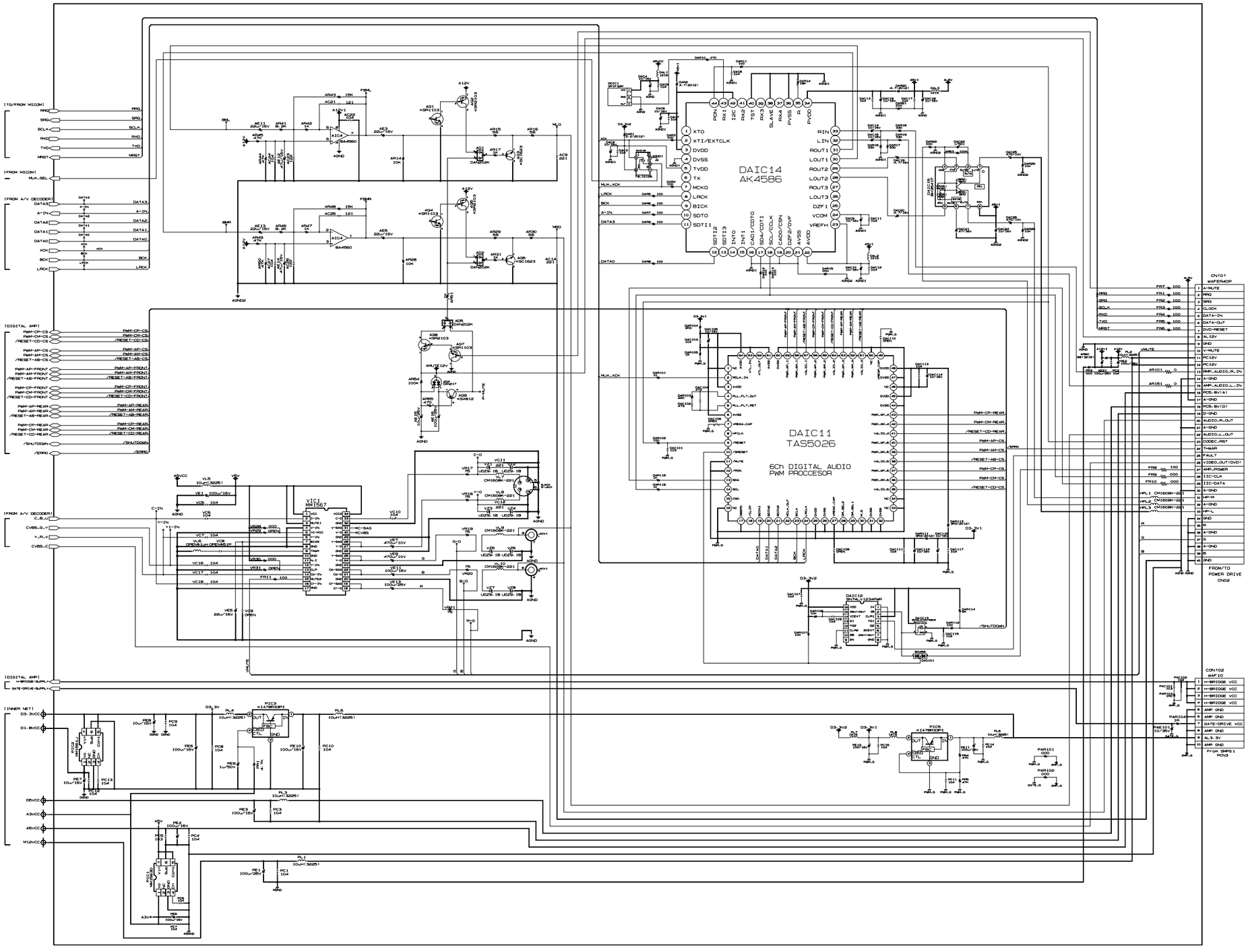
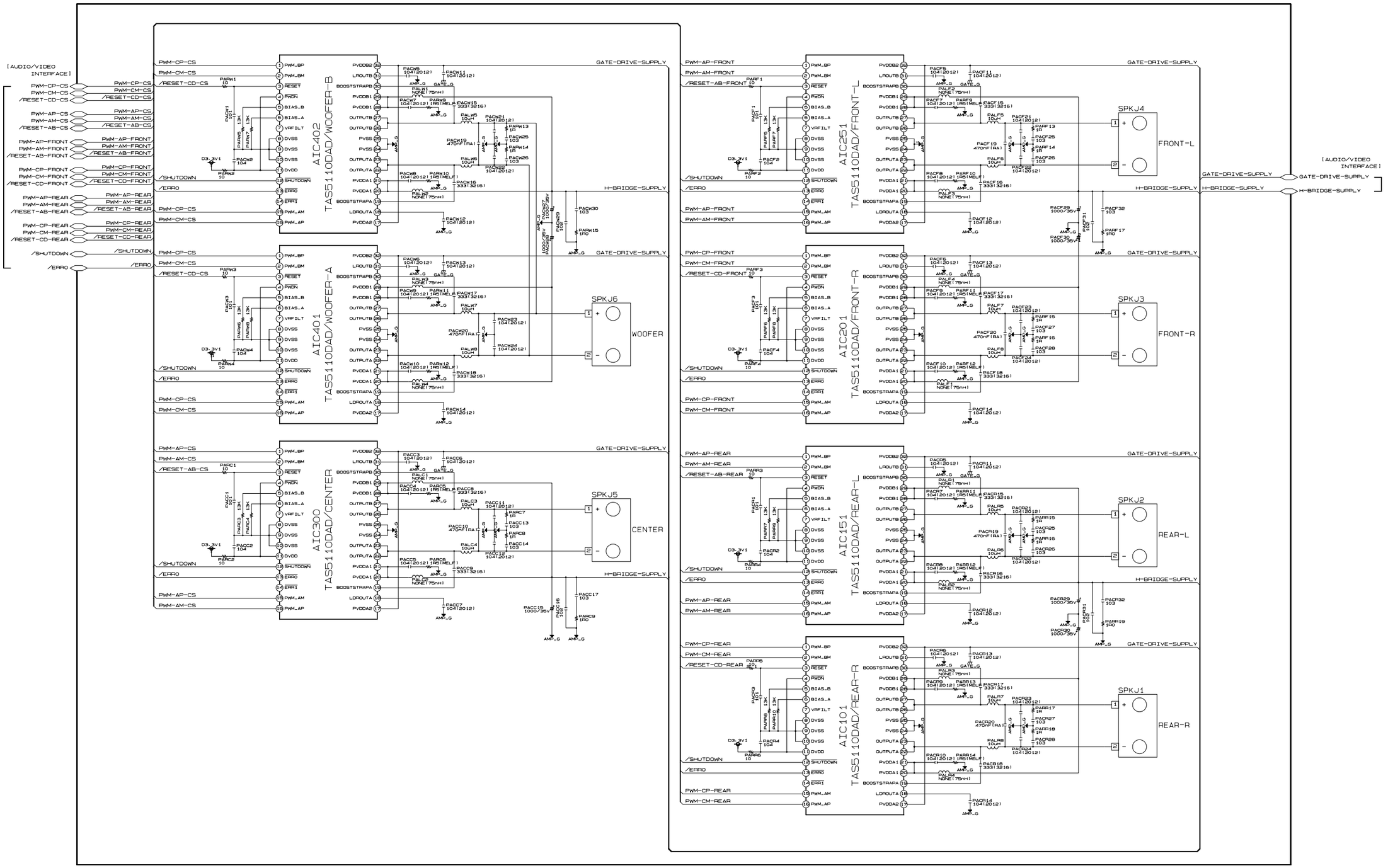
6-17 DVD Audio/Video Interface



6-18 Digital Amp



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